

May 13, 2003

Chuck Semborski, Environmental Supervisor  
Energy West Mining Company  
P. O. Box 310  
Huntington, Utah 84528

Re: Completion of the Midterm Review, PacifiCorp, Des-Bee-Dove Mine, C/015/017-MT03,  
Outgoing File

Dear Mr. Semborski:

As indicated in our March 19, 2003 letter to you, the Division has been conducting a Midterm permit review, in accordance with R645-303-211. This letter is written to present the results of that review. There is no follow-up required of you.

The enclosed Technical Analysis and Findings document discuss the issues in more detail. There were no deficiencies identified. Please review the document carefully. If you have any questions regarding the midterm permit review, please don't hesitate to call.

Sincerely,

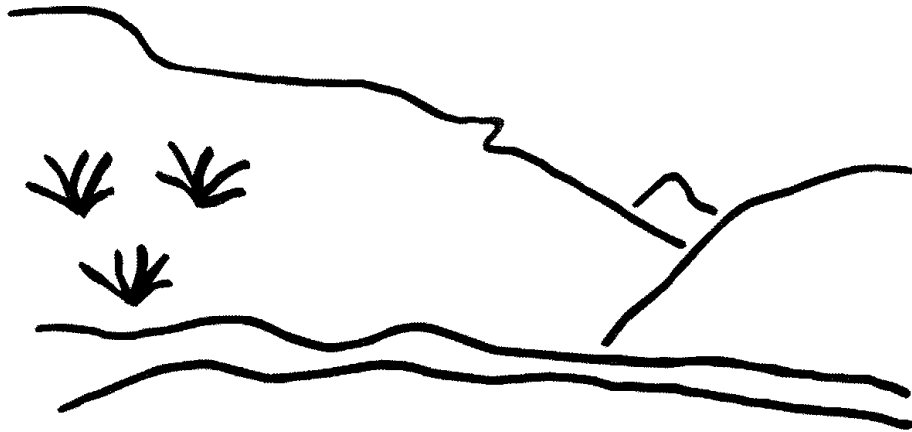
Daron R. Haddock  
Permit Supervisor

Enclosure

an

cc: Price Field Office  
O:\015017.DBD\FINAL\APPMT03.DOC

# State of Utah



## Utah Oil Gas and Mining

### Coal Regulatory Program

Des-Bee-Dove Mine  
Midterm review  
C/015/017-MT03  
Technical Analysis  
May 12, 2003



## TABLE OF CONTENTS

---

<b>INTRODUCTION.....</b>	<b>3</b>
<b>GENERAL CONTENTS.....</b>	<b>5</b>
IDENTIFICATION OF INTERESTS .....	5
VIOLATION INFORMATION.....	5
<b>ENVIRONMENTAL RESOURCE INFORMATION .....</b>	<b>7</b>
GENERAL .....	7
<b>OPERATION PLAN .....</b>	<b>9</b>
HYDROLOGIC INFORMATION .....	9
Diversions: General .....	9
Diversions: Perennial and Intermittent Streams .....	9
Diversions: Miscellaneous Flows .....	9
Sediment Control Measures.....	10
Siltation Structures: General .....	10
Siltation Structures: Sedimentation Ponds.....	10
Siltation Structures: Other Treatment Facilities .....	11
Siltation Structures: Exemptions.....	11
Discharge Structures .....	11
Impoundments.....	11
<b>RECLAMATION PLAN.....</b>	<b>13</b>
HYDROLOGIC INFORMATION .....	13
Hydrologic Reclamation Plan .....	13
REVEGETATION .....	13
BONDING AND INSURANCE REQUIREMENTS.....	15
Determination of Bond Amount .....	16

## TABLE OF CONTENTS

---

## TECHNICAL ANALYSIS

The Division ensures compliance with the Surface Mining Control and Reclamation Act of 1977(SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings, which comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference, which describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.



---

## INTRODUCTION

---

# INTRODUCTION

Appendices XIV and XV, incorporated into the MRP within the last year, are the current reclamation plan for the Des-Bee-Dove Mine. The Permittee has completed backfilling, grading, seeding, and hydromulching of the Phase 1 area (Appendix XIV) and is currently doing the same work in the Phase 2 area (Appendix XV).

The Division is required to review each active permit during its term, in accordance with R645-303-211. This review is to take place at the midpoint of the permit term (February 28, 2003 for the Des-Bee Dove Mine) and will cover pertinent elements that have been selected for review. The Midterm Review for the Des-Bee-Dove Mine is now being conducted and the items chosen for review encompass the following:

1. An AVS check to ensure that Ownership and Control information is current and correct.
2. A review of the plan to ensure that the requirements of all permit conditions, division orders, notice of violation abatement plans, and permittee initiated plan changes are appropriately incorporated into the plan document.
3. A review of the applicable portions of the permit to ensure that the plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
4. A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate year dollars.
5. The Division will conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices.

The Division notified PacifiCorp of its intent to conduct a mid-term review of the Des-Bee-Dove Mine in a letter dated March 19, 2003. Mid-term reviews include a technical site visit, in conjunction with the assigned compliance inspector, to document the status and effectiveness of operational, reclamation, and contemporaneous reclamation practices. Dennis Oakley and the DOGM team members inspected the Des-Bee-Dove permit area on May 1, 2003, with emphasis on the current reclamation practices and best technology currently available (BTCA) for sediment control.

Sediment control consists of: the sedimentation pond; silt fencing, a catch basin, diversions, and a berm at the sub-soil stockpile at the sedimentation-pond; silt fencing and a catch basin at the switchback (below the gate) of the entry road that treats runoff from the road; vegetation and surface roughening with deep-pocking at the reclaimed pump-house area; and permanent diversions, vegetation, and surface roughening with deep-pocking for the Phase 1 and



## INTRODUCTION

---

2 reclaimed areas. Pocks at the pump-house area have already filled with sediment, but vegetation has become established and there is no evidence of contributions of sediment to streamflow or runoff outside the permit area.

Surface pocking is intended to be the primary sediment control method for reclamation. The sedimentation pond will be removed as soon as the pocking is shown to be effective in controlling sediment transport and preventing, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area. The Permittee hopes to remove the pond this year.

The pump-house area and access road were reclaimed in 2000. The Little Dove and Beehive portal pad area was reclaimed in 2001 - 2002 (Phase 1) and the Deseret portal pad, main tipple, bathhouse pad, and access roads are being reclaimed now (Phase 2). Reclamation practices consist of backfilling and regrading, placement of topsoils and topsoil substitutes with supplemental fertilizer, deep pocking, and hydroseeding and mulching. Plunge pools and a riprap channel are being built through the reclaimed area, along with several "armored" channels across recontoured slopes.

The permit was renewed in 2000. The only special condition to the permit was that water-monitoring data were to be submitted in electronic format after the fourth quarter of 2000, and the Permittee has complied with that condition. There is no active or outstanding Division order or notice of violation and therefore no abatement plan. All Permittee initiated plan changes have been appropriately incorporated into the plan document.

---

**GENERAL CONTENTS**

---

## **GENERAL CONTENTS**

### **IDENTIFICATION OF INTERESTS**

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

#### **Analysis:**

Volume one of the Des-Bee-Dove MRP contains Ownership and Control information that was current as of December 2000: this information was incorporated into the MRP effective on November 26, 2001. Names of those who resigned or retired in 1999 or 2000 are included.

An Organizational Family Tree (OFT) was obtained through the Applicant Violator System (AVS) on April 16, 2003. There are numerous discrepancies between information in the MRP and that retrieved by the AVS. PacifiCorp has recently updated the Ownership and Control information in the Cottonwood/Wilberg Mine MRP and is in the process of updating it for the rest of the PacifiCorp mines, including Des-Bee-Dove.

#### **Findings:**

Ownership and Control information is out-of-date in the Des-Bee-Dove MRP, but revisions currently being prepared by PacifiCorp should bring this information up-to-date.

### **VIOLATION INFORMATION**

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

#### **Analysis:**

An Applicant Violator System (AVS) check was done on April 16 2003. There were no violations retrieved by the system.

#### **Findings:**

As there are no violations, information on violations is current and correct.



---

**ENVIRONMENTAL RESOURCE INFORMATION**

---

## **ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

### **GENERAL**

Regulatory Reference: 30 CFR 783.12; R645-301-411, -301-521, -301-721.

#### **Analysis:**

The Environmental Description section in Appendices XIV and XV, primarily references the approved MRP for details.

#### **Findings:**

Information provided in the application is considered adequate to meet the minimum Environmental Description section of the regulations.



---

## OPERATION PLAN

---

# OPERATION PLAN

### Analysis:

The Operation Plan section in Appendices XIV and XV, primarily references the approved MRP for details.

### Findings:

Information provided in the application is considered adequate to meet the minimum Operation Plan section of the regulations.

## HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

### Analysis:

#### Diversions: General

Diversions that existed during operation of the Des-Bee-Dove Mine have been removed during reclamation.

#### Diversions: Perennial and Intermittent Streams

There are no perennial streams. The drainage is ephemeral, flowing only in response to rainfall or snowmelt, and the watershed above the reclaimed mine site and sedimentation pond is only approximately 300 acres. A riprapped permanent diversion is being constructed through the reclaimed site to carry runoff from the site and the surrounding undisturbed areas.

#### Diversions: Miscellaneous Flows

The drainage includes numerous small tributary channels that flow down the steep sides of the canyon. Where some of these channels cross filled and recontoured areas they have been armored with rock to minimize erosion, but these armored channels have not been designed or built to meet a specified performance standard. The danger that flooding in these channels will result in damage to life, property, and the hydrologic balance is minimized because of the

armorings, the small size of these miscellaneous drainages, the remoteness of this site, and the small amount of precipitation.

### **Sediment Control Measures**

Additional contributions of suspended solids and sediment to streamflow or runoff outside the permit area are to be prevented to the extent possible using the BTCA. A sedimentation pond is generally considered the BTCA for sediment control, and the sedimentation pond has been and currently is the primary sediment control measure for the Des-Bee-Dove site.

Alternative sediment control measures are silt fencing, a catch basin, diversions, and a berm at the sub-soil stockpile at the sedimentation-pond; silt fencing and a catch basin (at the switchback below the gate) that treat runoff from the entry road; vegetation and surface roughening with deep-pocking at the reclaimed pump-house area; and permanent diversions (reconstructed channels), vegetation, and surface roughening with deep-pocking for the Phase 1 and 2 reclaimed areas.

Pocks at the pump-house area have already filled with sediment, but vegetation has become established and there is no evidence of contributions of sediment to streamflow or to runoff outside the permit area.

### **Siltation Structures: General**

The sedimentation pond was designed as the primary sediment control measure and is the only siltation structure. Because the pond is roughly 2,000 feet downstream of the disturbed area and because of the small amount of runoff, sediment from the Des-Bee-Dove disturbed area has rarely, if ever, reached the sedimentation pond.

Surface pocking and vegetation are intended to be the primary sediment control methods for reclamation. The sedimentation pond will be removed as soon as vegetation becomes established and the vegetation and pocking are shown to be effective in controlling sediment transport and preventing, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area. The Permittee hopes to remove the pond this year.

### **Siltation Structures: Sedimentation Ponds**

The sedimentation pond is the only siltation structure. The pond is designed for total containment of a 10-year, 24-hour storm.

---

**OPERATION PLAN**

---

**Siltation Structures: Other Treatment Facilities**

There are no “other treatment facilities” at the Des-Bee-Dove Mine. The only UPDES point-source discharge is the decant from the sedimentation pond. The decant valve is leaking an estimated 5 to 10 gallons per hour, but the water evaporates or percolates into the channel bed within a few hundred yards of the decant outfall.

**Siltation Structures: Exemptions**

There are no exempt areas at the Des-Bee-Dove Mine.

**Discharge Structures**

The pond is designed for total containment of runoff from a 10-year, 24-hour precipitation event. The sedimentation pond is partially decanted through piping installed in the embankment, flow being controlled by a manually-operated valve, but a pump must be used to completely decant the pond. The valve and pump control discharge so as to reduce erosion, prevent deepening or enlargement of stream channels, and minimize disturbance of the hydrologic balance, and also to hold TDS in the discharge stream below the one-ton/day UPDES limit. There is an emergency spillway of nonerodible, grouted riprap that was designed to safely discharge a 25-year, 24-hour precipitation event.

**Impoundments**

The sedimentation pond meets the requirements for impoundments. The catch basins retain less than one cubic-yard of water and are not considered impoundments regulated by the Coal Mining Rules.

**Findings:**

Sediment control measures utilize the BTCA.





---

RECLAMATION PLAN

---

## RECLAMATION PLAN

### HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

#### Analysis:

##### Hydrologic Reclamation Plan

Surface pocking and vegetation are intended to be the primary sediment control methods for reclamation. The sedimentation pond will be removed as soon as vegetation becomes established and the vegetation and pocking are shown to be effective in controlling sediment transport and preventing, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area. The Permittee hopes to remove the pond this year.

#### Findings:

The Hydrologic Reclamation Plan includes sediment control measures that utilize the BTCA.

### REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

The Permittee, in coordination with the Division, developed the final seed mix for Phase 1 and 2, which are listed on page 6 in the Appendices. The seed mix is the same for both Phases. During a field visit (April 30, 2003), the Division removed a seed tag from an empty bag located on the ground at the Des-Bee-Dove Mine permit area. The seed tag differs greatly from the seed mix approved by the Division. Table 1 lists:

- Seed mix approved by the Division.
- Seed mix from the tag found on the ground.
- Seed mix from a tag copied by Energy West from a bag in the PacifiCorp warehouse (May 1, 2003).

**RECLAMATION PLAN**

**TABLE 1**

<b>SEED TAG FROM PACIFICORP</b>	<b>APPROVED SEED MIX</b>	<b>SEED TAG ON GROUND</b>
Indian ricegrass	Indian ricegrass	Indian ricegrass
Thickspike wheatgrass	Thickspike wheatgrass	Sodar streambank wheatgrass This is a variety belonging to the same species as Thickspike wheatgrass.
Salina wildrye	Salina wildrye*	MISSING The Permittee had planned to use a substitute if seed was unavailable.
Bottlebrush squirreltail	Bottlebrush squirreltail	MISSING
Great basin wildrye	Great basin wildrye	Great basin wildrye
Western wheatgrass	Western wheatgrass	Western wheatgrass
Bluebunch wheatgrass secar The Permittee added this species to the mix.		
Pacific aster	Pacific aster	MISSING
Palmer penstemon	Palmer penstemon	MISSING
		Globemallow
		Cicer milkvetch
		Lewis flax
Fourwing saltbrush	Fourwing saltbrush	MISSING
Shadscale	Shadscale	MISSING
Winterfat	Winterfat	MISSING
Low rabbitbrush	Low rabbitbrush	MISSING

The mix from the bag found on the ground is missing one of the grass species, and all the forbs and shrubs. The Permittee must check with the contractor to insure correct application of seed mix and rate.

The mix from PacificCorp's warehouse has all the approved species. This mix also includes the additional species, Secar bluebunch wheatgrass. The plan does not mention the use of this species.

The Permittee agrees to augment the sites with transplants. If the site is covered with 6" or more than 6" of topsoil, then transplants will equal 750 or 200 per acre, respectively. Currently, the Permittee is not planning to plant containerized plants this year because of the low winter precipitation rate of 2003. The Permittee is hoping for a higher precipitation rate for the 2004-growing season and to plant containerized plants in the spring of 2004 (personal communications with Dennis Oakley, 5-1-03). The Permittee must understand that the period of

---

## RECLAMATION PLAN

---

extended responsibility for successful vegetation will begin after the last year of augmented revegetation-related work (refer to R645-301-357).

The Division visited the Des-Bee-Dove reclamation site on February 21, 2003. The field report reads:

*As observed this day, the permittee had seeded and hydromulched the reclaimed area from the switchback on the upper mines access road to the area formerly occupied by the portals associated with the Deseret Mine portals. This included the slope downhill from the road which had previously been occupied by a mine car dump point associated with a tippie which operated prior to the one which was in operation when the Mines were shut down..*

*The mine operator stated that the hydromulch was applied at 1 ton per acre. The amount of cover seems to visually agree with the application rate mentioned. The cover was greater on one side of the gouges than the other. The mine operator described this uneven application as "shadowing". Because of the location of where the hydromulch truck could operate, there most likely was no way to avoid shadowing for this northeastern site. The degree of shadowing may be seen on the Division's image database (02212003).*

*Seed application method used is unknown at this time. The mine operator was contacted on March 4, 2003 to explain the seeding method used. Most of the seed seemed to be under the mulch, although there were areas where the seed floated on top of the mulch. The seed on top was primarily lighter weight seed with seed tufts.*

*In the first area gouged and mulched (looking uphill on right side, far-right of upper section) the noxious weed-free hay was not well incorporated into the topsoil. The mine operator showed the Division that this problem had been addressed for subsequent areas gouged and mulched.*

The Permittee confirmed that seed was applied by hand, using a hurricane spreader, followed by hydromulch for the first three areas seeded during Phase 2 reclamation at Des-Bee-Dove (email from Chuck Semborski; 3/04/03).

### **Findings:**

The Permittee is currently implementing revegetation techniques that mostly agree with the approved MRP.

## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

## **Analysis:**

### **Determination of Bond Amount**

As part of the midterm, the Division reviewed the reclamation bond. The first part of the reclamation bond analysis is to determine if any additional work has been done that would require bonding. During the onsite visit the Division found no additional disturbance that required bonding.

Currently the Permittee is backfilling and grading the site. The Permittee hopes to be able to apply for Phase I bond release by fall.

The second part of bond evaluation during the midterm is to determine if sufficient bond exists so that in the event of bond forfeiture the Division could reclaim the site. The current reclamation cost estimate for the Des-Bee-Dove Mine is \$1,246,000. The current bond amount is \$1,837,712. Therefore, the bond amount is adequate to cover the cost of reclamation.

## **Findings:**

The Permittee has met the minimum requirements for the bonding section of the regulations.